

## **REMARKS**

The Applicants wish to express appreciation for the Examiner's recognition that claims 7 and 36 are allowable, and for the opportunity to speak with Examiner Jeffrey Harold during a telephone conference May 26, 2006 regarding the rejection of claim 99. Examiner Harold agreed at that time that the listing of claim 99 on the Continuation Sheet of the Office Action Summary and on page 11, line 1 of the Office action as a rejected claim are typographical errors, and that claim 99 should be shown as being objected to.

### **Amendments to the Claims**

Independent claim 9 has been amended to modify the text "...to the estimated signal characteristic;..." to read "...to the estimated energy level of the far end echo;..." to correct antecedent basis. Claim 9 has also been rewritten to incorporate the limitations of dependent claim 14. Claim 14 has been cancelled. Applicants respectfully submit that no new matter is added by this amendment.

Claims 11, 12, 15, 23, 24, 25 and 27 have been amended to use the term "energy level of the far end echo" to be consistent with the language in claim 9, from which they depend. The Applicants respectfully submit that no new matter has been added by these amendments.

Independent claim 32 has been rewritten to incorporate the limitations of dependent claim 42 and intervening claim 39. Claims 39 and 42 have been cancelled. Claims 40 and 43 have been amended to correct claim dependency. Applicants respectfully submit that no new matter is added by this amendment.

Independent claim 72 has been rewritten to incorporate the limitations of dependent claim 78 and intervening claim 74. Claims 74 and 78 have been cancelled. Claims 75, 77 and 79 have been amended to correct claim dependency. Applicants respectfully submit that no new matter is added by this amendment.

Independent claim 82 has been amended to modify the text "...to the estimated signal characteristic;..." to read "...to the estimated energy level of the far end echo;..." to correct antecedent basis, and has been rewritten to incorporate the limitations of dependent claim 88. Claim

88 has been cancelled. Applicants respectfully submit that no new matter is added by this amendment.

Claims 83, 84, 89, 98, 99, 100 and 104 have been amended to use the term “energy level of the far end echo” to be consistent with the language in claim 82, from which they depend. The Applicants respectfully submit that no new matter has been added by these amendments.

Independent claim 109 has been rewritten to incorporate the limitations of dependent claim 129 and 134-136, and of intervening claims 114, 119 and 122. Claims 114, 119, 122, 129 and 134-136 have been cancelled. Claims 115, 118, 120, 123, 130, 132 and 133 have been amended to correct claim dependency. Applicants respectfully submit that no new matter is added by this amendment.

Claims 30 and 31 have been amended to depend from claim 28, to correct antecedent basis. Applicants respectfully submit that no new matter is added by this amendment.

Claims 1, 4, 6, 8, 14, 39, 42, 59-63, 65, 74, 78, 88, 114, 119, 122, 129 and 134-136 are cancelled in this response.

Claims 28, 29, 35, 66, 73, 94, 105, 106 and 110 have been amended to correct noted minor typographical errors. The Applicants respectfully submit that no new matter has been added by these amendments.

### **Objections to the Claims**

Claims 14, 16-18, 22-25, 28-31, 38, 42, 45-51, 55-58, 78, 88, 90-92, 97, 98, 100, 106, 126-129 and 134-136 were objected to in the Office action, as being dependent upon a rejected base claim, but were deemed allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants’ representative and Examiner Harold reached agreement during a telephone conference on May 26, 2006 that, due to a typographical error, claim 99 was incorrectly shown in the Office action as being rejected, and should instead be listed among the claims objected to. The Applicants respectfully traverse the rejection of the respective base claims. However, in an effort to move the Application towards issue, Applicants have rewritten claims 16-18, 22-25, 28, 38, 45, 51, 55-58, 90-92, 97, 98-100,

106, and 126-128 in independent form, respectively, as new claims 137-139, 140-143, 144, 148, 149, 155, 156-159, 160-162, 163, 164-166, 167 and 168-170, including all of the limitations of their respective base claims and any intervening claims. Applicants have cancelled claims 129 and 134-136. Applicants respectfully submit that these amendments overcome the objections to claims 14, 16-18, 22-25, 28-31, 38, 42, 45-51, 55-58, 78, 88, 90-92, 97-100, 106, 126-129 and 134-136. Therefore, the Applicants respectfully request that the objections to claims 14, 16-18, 22-25, 28-31, 38, 42, 45-51, 55-58, 78, 88, 90-92, 97-100, 106, 126-129 and 134-136 be withdrawn.

### **Rejection of Claims**

Claims 1, 4, 6-9, 11-32, 35-136 are pending in the Application. Claims 7 and 36 were allowed, claims 1, 4, 6, 8, 9, 11-13, 15, 19-21, 26-28, 31, 32, 35, 37, 39-44, 46, 47, 52-55, 59-77, 79-87, 89, 93-96, 99, 101-105, 107-125 and 130-133 were rejected, and claims 14, 16-18, 22-25, 28-31, 38, 42, 45-51, 55-58, 78, 88, 90-92, 97, 98, 100, 106, 126-129 and 134-136 were objected to, in the Office action mailed January 26, 2006. The Applicants' representative and Examiner Harold reached agreement during a telephone conference on May 26, 2006 that the listing of claim 99 as rejected is a typographical error. New claims 137-170 are added, and claims 1, 4, 6, 8, 14, 39, 42, 59-63, 65, 74, 78, 88, 114, 119, 122, 129 and 134-136 are cancelled in this response. Claims 1, 7, 9, 32, 36, 72, 82, 109 and 137-170 are independent claims. Claims 11-13, 15-31, 64 and 66-68, claims 35, 37, 39-58 and 69-71, claims 73-77 and 79-81, claims 83-87 and 89-106, and claims 110-113, 115-128 and 130-133 depend directly or indirectly, respectively, from claims 9, 32, 72, 82 and 109. The Applicants respectfully request reconsideration of claims 7, 9, 11-13, 15-32, 35-38, 40, 41, 43-58, 64, 66-73, 75-77, 79-87, 89-113, 115-121, 123-128, and 130-133, and consideration of new claims 137-170, in light of the following remarks.

### **Rejection of Claims Under 35 U.S.C. §103**

Claims 1, 4, 6, 8, 9, 11-13, 15, 19-21, 26-28, 31, 32, 35, 37, 39-44, 46, 47, 52-55, 59-77, 79-87, 89, 93-96, 99, 101-105, 107-125 and 130-133 were rejected under 35 U.S.C. §103(a) as being unpatentable over Reesor et al. (US 6,282,286 B1, hereinafter "Reesor") in view of Romesburg (US 6,185,300 B1). The Applicants respectfully traverse the rejection. However, in an

effort to move the Application towards issuance, the Applicants have cancelled claims 1, 4, 6, 8, 59-63, 65, 114, 119 and 122, and have amended independent claims 9, 32, 72, 82 and 109, to include all of the limitations of claims 14, 42, 78, 88 and claims 129 and 134-136, respectively, and any intervening claims. Applicants hereby reserve the right to resubmit cancelled claims 1, 4, 6, 8, 59-63 and 65 in a continuing application. Applicants respectfully submit that claims 11-13, 15-31 and 66-68, claims 35, 37, 38, 40-58 and 69-72, claims 73-81, claims 83-87 and 89-108, and claims 110-136 depend either directly or indirectly, respectively, from independent claims 9, 32, 72, 82 and 109. Applicants respectfully submit that claims 9, 32, 72, 82 and 109 are allowable for at least the reasons set forth above. Because claims 11-13, 15-31 and 66-68, claims 35, 37, 38, 40-58 and 69-72, claims 73-81, claims 83-87 and 89-108, and claims 110-136 depend either directly or indirectly, respectively, from independent claims 9, 32, 72, 82 and 109, Applicants respectfully submit that claims 11-13, 15-31 and 66-68, claims 35, 37, 38, 40-58 and 69-72, claims 73-81, claims 83-87 and 89-108, and claims 110-136 are allowable, as well. Therefore, Applicants respectfully request that the rejection of claims 11-13, 15, 19-21, 26-28, 31, 32, 35, 37, 39-44, 46, 47, 52-55, 59-77, 79-87, 89, 93-96, 99, 101-105, 107-125 and 130-133 under 35 U.S.C. §103(a) be withdrawn.

### **Newly Added Claims**

Applicant has added new independent claims 137-170 as described above. Applicants respectfully submit that no new matter is added by these new claims.

### **Conclusion**

The Applicants wish to express appreciation for the Examiner's recognition that claims 7 and 36 are allowable, and believe that in light of the reasons set forth above, all of claims 7, 9, 11-13, 15-32, 35-38, 40, 41, 43-58, 64, 66-73, 75-77, 79-87, 89-113, 115-121, 123-128, 130-133 and 137-170 are now in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to telephone the undersigned at (312) 775-8000.

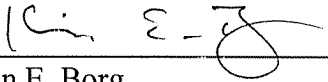
A Notice of Allowability is courteously solicited.

Appl. No. 09/533,022  
Amdt. dated June 8, 2006  
Resp. to Office action of January 26, 2006

The Commissioner is hereby authorized to charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 13-0017.

Respectfully submitted,

Dated: June 8, 2006

  
\_\_\_\_\_  
Kevin E. Borg  
Reg. No. 51,486

McANDREWS, HELD & MALLOY, LTD.  
500 West Madison Street  
Suite 3400  
Chicago, Illinois 60661  
Phone (312) 775-8000  
Facsimile (312) 775-8100